Port Econ J (2008) 7:63–73
DOI 10.1007/s10258-007-0021-1

ORIGINAL ARTICLE

Moments of truncated *t* and *F* distributions

Saralees Nadarajah · Samuel Kotz

Received: 19 November 2006 / Accepted: 22 May 2007 / Published online: 13 July 2007

Abstract Truncated distributions commonly arise in economics and related areas, see, for example, Lee (Econ Lett 3:165–169, 1979), Lien (Econ Lett 19:243–247, 1985; Econ Lett 20:45–47, 1986), Burdett (Econ Lett 52:263–267, 1996), Sercu (Insur: Math and Econ 20:79–95, 1997), Abadir and Magdalinos (Econom Theory 18:1276–1287, 2002), and Horrace (J Econom 126:335–354, 2005). In this note, we consider the most commonly encountered truncated distributions with heavy tails: the truncated *t* distribution and the truncated *F* distribution. For each of these distributions, we derive explicit expressions for the moments and estimation procedures by the method of moments and the method of maximum likelihood. An application is illustrated to a popular data set in the econometric literature.

Keywords Moments · Truncated *F* distribution · Truncated regression · Truncated *t* distribution

JEL Classification C1

S. Nadarajah
School of Mathematics, University of Manchester, Manchester M60 1QD, UK
e-mail: saralees.nadarajah@manchester.ac.uk

S. Kotz
Department of Engineering Management and Systems Engineering,
George Washington University, Washington, DC 20052, USA